

Docket No.: 043876-0147 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Customer Number: 20277

Craig HANSEN, et al.

Confirmation Number: 6579

Application No.: 10/705,946

Group Art Unit: 2183

Filed: November 13, 2003

Examiner: Unknown

For: PROGRAMMABLE PROCESSOR AND METHOD FOR PARTITIONED GROUP SHIFT

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

In accordance with the provisions of 37 C.F.R. 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached form PTO-1449. It is respectfully requested that the documents be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

Applicants are submitting to the Office a single paper copy of each of the documents listed on the attached form PTO-1449 in connection with a corresponding Supplemental Information Disclosure Statement filing for U.S. Patent Application No. 10/418,113. Applicants are separately filing a Petition requesting waiver of Rules 1.4(b) and 98(a)(2), which requires copies of the documents listed on the attached form PTO-1449 to be provided herewith. In view of the Office's practice of scanning documents into the Image File Wrapper, it is believed that providing a single set of paper copies will enable the Office to process the papers efficiently and expedite the

10/705,946

Examiner's consideration of the same. Furthermore, the attached form PTO-1449 includes citations to some materials for which it is difficult to obtain additional copies. In view of the Petition and in the interests of efficiency, Applicants' respectfully request that a copy of each of the cited documents be made of record in the present application.

This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No certification or fee is required.

Applicants bring to the Examiner's attention the following pending applications of Craig C.

Hansen et al., which may include subject matter related to the present application:

Application Number	Title
10/418,113	Multiplier Array Processing System With Enhanced Utilization At Lower Precision
10/436,340	System With Wide Operand Architecture, And Method
10/616,303	Programmable Processor And Method With Wide Operations
10/646,787	Method And Software For Partitioned Group Element Selection Operation
10/712,430	System And Software For Catenated Group Shift Instruction
10/716,561	Programmable Processor And Method For Matched Aligned And Unaligned Storage Instructions
10/716,568	System And Software For Matched Aligned And Unaligned Storage Instructions
10/757,515	Method And Software For Multithreaded Processor With Partitioned Operations
10/757,516	Programmable Processor And System For Store Multiplex Operation
10/757,524	Programmable Processor And For Partitioned Group Element Selection Operation
10/757,836	Programmable Processor And System For Partitioned Floating-Point Multiply-Add Operation.

10/757,851	Method And Software For Partitioned Floating-Point Multiply-Add Operations
10/757,866	Method And Software For Store Multiplex Operation
10/757,925	Method And Software For Partitioned Group Element Selection Operation
10/757,939	Multithreaded Programmable Processor And System With Partitioned Operations

The attached form PTO-1449 includes (but is not exclusively limited to) documents that were cited in on-going litigation proceedings between the assignee of the present application, Dell Inc. and Intel Corp. (U.S. District Court for the Eastern District of Texas, Marshall Division (Civil Action No. 2:04-CV-120(TJW)). This litigation involves seven patents that are in the same family as each of the above applications.

Additionally, some documents were cited in related foreign applications. A copy of the foreign search report or office action is attached for the Examiner's information.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP

Richard E. Brown

Registration No. 47,453

600 13th Street, N.W. Washington, DC 20005-3096 Phone: 202.756.8000 REB:llg

Facsimile: 202.756.8087 **Date: June 10, 2005**

Please recognize our Customer No. 20277 as our correspondence address.

SHEET 1 OF 11

Relevant Passages or Relevant

Figures Appear

INFORMATION DISCLOSURE CITATION IN AN APPLICATION

ATTY. DOCKET NO. **043876-0147**

SERIAL NO. **10/705,946**

APPLICANT

HANSEN, C., et al.

(PTO-1449)

Document Number

Number-Kind Code2 (11 known)

4,658,349 A

4,852,098

4,875,161

4,949,294

4,953,073

4,959,779

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05/04/1993

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November 13, 2003

Document

Gafken

Brechard et al.

Lahti

Wambergue

Moussouris et al.

Weber et al.

Moussouris et al.

Murakami et al.

Wilson et al.

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U	.S. PATENT	DOCUMENTS		
	Publication Date	Name of Patentee or Applicant of Cit	ed	Pages, Columns, Lines, Where

	† 	1	5.004.040	07/07/4000	Health et al			
		US	5,231,646	07/27/1993				
		US	5,233,690	08/03/1993	Shelock et al.			
		US	5,268,995	12/07/1993	Diefendorff et a	··		
		US	5,347,643 A	09/13/1994	Kondo Nobukazu e			
		US	5,412,728 a	05/03/1995	Besnard Christian	et al.		
		US	5,430,660 A	07/04/1995	John Hengeveld e	t al.		
· ·		US	5,471,628	11/28/1995	Phillips et al.			
		US	5,515,520	05/07/1996	Hatta et al.			
		บร	5,533,185	07/02/1996	Lentz et al.			
		US	5,590,365	12/31/1996	lde et al.			
		υs	5,636,351	06/03/1997	Lee			
		US	5,742,840	04/21/1998	Hansen et al.			
		US	5,778,412 A	07/07/1998	Gafken			
		υs	5,828,869	10/27/1998	Johnson et al.			
		Ū\$	5,996,057	11/30/1999	Scales, III et al			
		US	6,453,368 B2	09/17/2002	Yamamoto			
		US	6,657,908 B1	05/20/2003	Furuhashi			
				FOREIGN PAT	ENT DOCUMENTS			
EXAMINER'S		Fo	reign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Line	es	Franslation
INITIALS	CITE NO.	Cou	intry Codes -Number 4 -Kind Codes (if known)	MM-DD-YYYY	Applicant of Cited Document	Where Relevant Figures Appear	Yes	No
			JP 3268024	11/28/1991	Hitachi Ltd.			T
			EP 0 468 820 A2	01/29/1992	Fujitsu Limited			
			WO 93/01565	01/21/1993	Seiko Epson Corporation			1
			CA 1 323 451	10/19/1993	Northern Telecom Ltd.		1	1
	1		JP 6095843	04/08/1994	IBM			
			EP 0 651 321 A	05/03/1995	Advanced Micro Devices Inc.			
			EP 0 654 733 A1	05/24/1995	Hewlett-Packard			
			JP-S60-217435	10/31/1985	Toshiba Corp.			
			WO 97/07450	02/27/1997	Microunity Systems Engineering, Inc.			
		EX	AMINER			DATE CONSIDERED		

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¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

INFORMATION DISCLOSURE SERIAL NO. ATTY, DOCKET NO. 043876-0147 10/705.946 CITATION IN AN APPLICATION APPLICANT HANSEN, C., et al. FILING DATE **GROUP** (PTO-1449) 2183 November 13, 2003 OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) **EXAMINER'S** Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where INITIALS CITE published. NO. L-1 Ide, et al., "A 320-MFLOPS CMOS Floating-point Processing Unit for Superscalar Processors," p. 12-21, 28 March 1993, IEEE J. OF SOLID-STATE CIRCUITS. 1-2 K. Uchiyama et al., The Gmicro/500 Superscalar Microprocessor with. Branch Buffers, IEEE Micro, October 1993, p. 12-21. L-3 Ruby B. Lee, Realtime MPEG Video Via Software Decompression on a PA-RISC Processor, IEEE (1995). Karl M. Guttag et al. "The TMS34010: An Embedded Microprocessor", IEEE June 1988, p. 186-190. L-5 M. Awaga et al., "The µVP 64-bit Vector Coprocessor: A New Implementation of High-Performance Numerical Computation", IEEE Micro, Vol. 13, No. 5, October 1993, p.24-36. L-6 Tom Asprey et al., "Performance Features of the PA7100 Microprocessor", IEEE Micro (June 1993), p. 22-35. Gove, Robert J., "The MVP: A Highly-Integrated Video Compression Chip," IEEE Data Compression Conf., March (1994), pp. 215-224. L-6 Woobin Lee, et al., "Mediastation 5000: Integrating Video and Audio," IEEE Multimedia, 1994, pp. 50-61. L-9 Karl, Guttag et. al "A Single-Chip Multiprocessor for Multimedia: The MVP," IEEE Computer Graphics & Applications, November, 1992, p. 53-64. TMS32OC8O (MVP) Master Processor User's Guide, Texas Instruments, March, 1995, p. 1-33. L-11 TMS320C80 (MVP) Parallel Processor User's Guide ["PP"]; Texas Instruments March 1995, p. L-12 Shipnes, Julie, "Graphics Processing with the 88110 RISC Microprocessor," IEEE COMPCOM, (Spring, 1992) pp. 169-174. L-13 ILLIAC IV: Systems Characteristics and Programming Manual, May 1, 1972, p. 1-78. L-14 N. Abel et al., ILLIAC IV Doc. No. 233, "Language Specifications for a Fortran-Like Higher Level Language for ILLIAV IV, August 28, 1970, p. 1-51. L-15 ILLIAC IV Quarterly Progress Report: October, November, December 1969; Published January 15, 1970, pp. 1-15. L-16 N.E. Abel et al., Extensions to Fortran for Array Processing (1970) pp. 1-16. **EXAMINER** DATE CONSIDERED

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EXAMINER'S INITIALS	CITE NO.	Include name of the author (in CAPITAL LETTERS) journal, serial, symposium, catalog, etc.), date, page published.				
	L-17	Morris A, Knapp et al.ILLIAC IV Syste "Bulk Storage Applications in the ILLIA"		nming Manual (1972)		
	L-18	Rohrbacher, Donald, et al., "Image Proc Computer, Vol. 10, No. 8, pp 54-59 (Au				
	Siegel, Howard Jay, "Interconnection Networks for SIMD Machines," IEEE Computer, Vol. 12, No. 6, (June, 1979) (reprinted version pp 110-118).					
	L-20 Mike Chastain, et. al., "The Convex C240 Architecture", Conference of Supercomputing, IEEE 1988, p. 321-329.					
	Gwennap, Linley, "New PA-RISC Processor Decodes MPEG Video: HP's PA-71 00LC Uses New Instructions to Eliminate Decoder Chip," Microprocessor Report, (January 24, 1994) pp. 16-17.					
	L-22	Patrick Knebel et al., "HP's PA7100LC (1993), pp. 441-447.	P's PA7100LC: A Low-Cost Superscalar PARISC Processor," IEEE			
	L-20 Kurpanek et al., "PA7200: A PA-RISC Processor with Integrated High Performance MP Bus Interface," EEEE (1994), pp. 375-82.					
	L-27	Hewlett Packard, PA-RISC 1.1 Architect 1994, pp. 1-424.	cture and Instruction Set Refere	ence Manual, 3rd ed. Feb.		
	L-25 Margaret Simmons, et. al "A Performance Comparison of Three Supercomputers – Fujitsu VP-2600, NEC SX-3, and Cray Y-MP",. 1991 ACM, p. 150-157.					
	L-26 Smith, J. E., "Dynamic Instruction Scheduling and the Astronautics ZS-1," Computer, Vol. 22, No. 7, July 1989, at 21-35 and/or the Astronautics ZS-1 computers made used, and/or sold in the United States, pp. 159-173.					
	L-27	Nikhil et al., "T: A Multithreaded Massi Group Memo 325-2 (March 5, 1992), p		mputation Structures		
	L-28	Undy, et al., "A Low-Cost Graphics and (1994).	l Multimedia Workstation Chip	Set," IEEE pp. 10-22		
	•	EXAMINER	DATE C	ONSIDERED		

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EXAMINER'S INITIALS	CITE NO.	Include name of the author (in CAPITAL LETTERS journal, serial, symposium, catalog, etc.), date, pag published.				
	L-42	Kristen Davidson, Declaration of Krist Ginicro 32-bit Family of Microprocess February 1992.				
	L-43	Bit Manipulator," IBM Technical Disc https://www.delphion.com/tdbs/tdb?ord		4, pp 1576-1576		
	"Using a Common Barrel Shifter for Operand Normalization, Operand Alignment and Operand Unpack and Pack in Floating Point," IBM Technical Disclosure Bulletin, July, 1986, p. 699-701 https://www.delphion.com/tdbs/tdb?order=86A+61578.					
	L-45	Motorola MC88110 Second Generation RISC Microprocessor User's Manual (1991).				
	L-46	Berkerele, Michael J., "Overview of th 1993, p. 148-1 56.	e START (*T) Multithreaded C	omputer" IEEE January		
	L-47 Diefendorff, et al., "Organization of the Motorola 88110 Superscalar RISC Microprocessor" IEEE Micro April, 1992, p.39-63;					
	Barnes, et al., The ILLIAC IV Computer, IEEE Transactions on Computers, vol. C-17, no. 8, August 1968.					
	L-49	Ruby B. Lee et al., Real-Time Softward 100LC Processors, Hewlett-Packard J.		ltimedia-Enhanced PA 7		
	L-50	Ruby B. Lee, "Realtime MPEG Video IEEE 1995, p.186-192.	Via Software Decompression or	n a PA-RISC Processor,"		
	L-51 "The Multimedia Video Processor (MVP): A Chip Architecture for Advanced DSP Applications," Robert J. Gove, IEEE DSP Workshop (1994).					
	L-52	Convex Assembly Language Reference	e Manual, First Ed., December 1	991.		
	L-53	Convex Architecture Reference Manua Corporation (April 1992).	al (C Series), Sixth Edition, Con-	vex Computer		
		EXAMINER	DATE C	ONSIDERED		

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	L-70	"Control Data 6400/6500/ 6600 Compu	iter Systems, SCOPE Reference	Manual, September1966.		
	L-71	"Control Data 6400/6500/ 6600 Compu	iter Systems, COMPASS Refer	ence Manual, 1969.		
	L-72	Tolmie, Don, "Gigabit LAN Issues: HI Laboratory Rep. No. LA-UR 94-3994 (Los Alamos National		
	L-73	ILLIAC IV: Systems Characteristics an	d Programming Manual, May	1, 1972.		
	L-71	1979 Annual Report: The S-1 Project V	ol. 1 Architecture 1979.			
	L-75	1979 Annual Report: The S-1 Project V	ol.2 Hardware 1979.			
	L-76	L-76 S-1 Uniprocessor Architecture, April 21, 1983 (UCID 19782) See also S-1 Uniprocessor Architecture (SMA-4), Steven Cornell;				
	L-\$2	Broughton, et al., The S-1 Project: Top-End Computer Systems for National Security Applications, October 24, 1985.				
	L-78	Convex Data Sheet C4/XA High Perfor Corporation.	mance Programming Environn	nent, Convex Computer		
	L-79	Bowers et al., "Development of a Low- System," Hewlett-Packard J. Apr. 1995		user Business Server		
	L-83	Mick Bass et al., "The PA 7100LC Mic Competitive Environment Hewlett-Pack		Design Decisions in a		
~_	L-79	Mick Bass, et. al. "Design Methodologi Journal April 1995 p. 23-35.	ies for the PA 7100LC Micropr	ocessor", Hewlett Packard		
	L-82	Wang, Chin-Liang, "Bit-Level Systolic Transactions on Computers, Vol. 43, No.		in GF (2Am)," IEEE		
	Ĺ-83	Markstein, P.W., "Computation of Elen Processor," IBM J. Res. Develop., Vol.				
	L-84 Donovan, Walt, et al., "Pixel Processing in a Memory Controller," IEEE Computer Graphics and Applications, January, 1995 p. 51-61.					
	L-85	Ware et al., 64 Bit Monolithic Floating Vol. Sc-17, No. 5, October 1982, pp. 89	g Point Processors, IEEE Journal Of Solid-state Circuits, 898-907.			
	L-86	Hwang, "Advanced Computer Architec at 475, p. 898-907.	ture: Parallelism, Scalability, P	rogrammability" (1 993)		
	<u> </u>	EXAMINER	DATE C	ONSIDERED		

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EXAMINER'S INITIALS					
	L-87	Hwang & Degroot, "Parallel Processing	for Supercomputers & Artific	ial Intelligence," 1993.	
	L-88	Nienhaus, Harry A., "A Fast Square Ro- Techniques," IEEE Proceedings Southe		nd Table Lookup	
	L-89	Eisig, David, et al., "The Design of a 64 171-178.	-Bit Integer Multiplier/Divider	Unit," IEEE 1993 pp	
	L-90 Margulis, Neal, "i860 Microprocessor Architecture," Intel Corporation 1990.				
L-91 Intel Corporation, 3860 XP Microprocessor Data Book" (May 1991).					
	L-92	L-92 Hewlett-Packard, "HP 9000 Series 700 Workstations Technical Reference Manual Model 712 (System)" January 1 994.			
	L-93	Ruby Lee, et al., Pathlength Reduction lp. 129-135.	Features in the PA-RISC Archi	tecture Feb. 24-28, 1992	
	L-98	Kevin Wadleigh et al., High Performand Supercomputer, Poster, Conference on S	ce FFT Algorithms for the Con Supercomputing, Washington,	vex C4/XA D.C., Nov. 1994.	
	L-95	Fields, Scott, "Hunting for Wasted Com Puts Idle PC's to Work," Univ. of Wisc		for Computing Networks	
	L-96	Litzkow et al., "Condor - A Hunter of Id	dle Workstations," IEEE (1 988	B) p. 104-111.	
	L-97	Gregory Wilson, The History of the Dev history/Parallel.html, p. 1-38.	velopment of Parallel Computing	ng" http://ei.cs.vt.edu/-	
	Marsha Jovanovic and Kimberly Claffy, Computational Science: Advances Through Collaboration" "Network Behavior" San Diego Supercomputer Center 1993 Science Report, p.1- 11 [http://www.sdsc.edu/Publications/SR93/network_behavior.html].				
	L-99	National Science Foundation (NSF) [wv	ww.itrd.gov/pubs/blue94/sectio	n.4.2.html] 1994.	
	L-100	Intel Corporation, "Paragon User's Guid	de" (Oct. 1993).		
	L-101	Turcotte, Louis H., "A Survey of Softwa Resources" Engineering Research Cente 1-150.			
		EXAMINER	DATE C	ONSIDERED	

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INFORMATION DISCLOSURE CITATION IN AN APPLICATION			ATTY. DOCKET NO. 043876-0147	SERIAL NO. 10/705,946			
			APPLICANT HANSEN, C., et al.				
		(PTO-1449)	FILING DATE November 13, 2003	GROUP 2183			
			ding Author, Title, Date, Pertinent Pages,				
EXAMINER'S INITIALS	CITE NO.	Include name of the author (in CAPITAL LETTER journal, serial, symposium, catalog, etc.), date, papublished.					
	L-102	Patterson, Barbara, "Motorola Annous Using Superscalar Chip" Motorola Co [http://badabada.org/misc/mvme197_a	omputer Group, p. 1-3	gle Board Computer			
	L-103	Culler, David E., et al., "Analysis Of I Multiprogramming", Report No. UCB					
-	L-104	James Laudon et al., "Architectural And Implementation Tradeoffs In The Design Of Multiple-Context Processors", CSL-TR-92-523, May 1992 p. 1-24.					
L-105 Ide, et al., "A 320-MFLOPS CMOS Floating-point Processing Unit for Superscalar Processes 28 IEEE Custom Integrated Circuits Conference, 1992, p. 30.2.1-30.2.4.							
	L-106	High Speed DRAMs, Special Report, IEEE Spectrum, vol. 29, no. 10, October 1992.					
	L-108	Moyer, Steven A., "Access Ordering A December 18, 1992.	Algorithms for a Multicopy Men	nory," IPC-TR-92-0 1 3,			
	L-108	Moyer, Steven A., "Access Ordering and Effective Memory Bandwidth," Ph.D. dissertation, University of Virginia, April 5, 1993.					
	L-109	"Hardware Support for Dynamic Access Ordering: Performance of Some Design Options", Sally McKee, Computer Science Report No. CS-93-08, August 9, 1993.					
	L-110	McGee et al., "Design of a Processor Bus Interface ASIC for the Stream Memory Controller" p. 462-465.					
	L-1 08	McKee et al., "Experimental Implementation of Dynamic Access Ordering," August 1, 1993, p. 1-10.					
	L-112`	McKee et al., Increasing Memory Bandwidth for Vector Computations, Technical Report CS-93-34 August 1, 1993, p.1-18.					
	L-113	Sally A. McKee et al., "Access Order and Memory-Conscious Cache Utilization" Computer Science Report No. CS-94- 10, March 1, 1994, p.1-17.					
	L-114	McKee, et. al., "Bounds on Memory E Report CS-95-32, March 1, 1995.	Bandwidth in Streamed Computa	tions," Computer Science			
		EXAMINER	DATE C	CONSIDERED			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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EXAMINER'S INITIALS	CITE NO.	Include name of the author (in CAPITAL LETTERS), journal, serial, symposium, catalog, etc.), date, page published.				
	L-115	McKee, Sally A., "Maximizing Memory Bandwidth for Streamed Computations," A Dissertation Presented to the Faculty of the School of Engineering and Applied Science at the University of Virginia, May 1995.				
	L-116	A Systematic Approach to Optimizing a Landon, et. Al., Computer Science Rep	ort No. CS-95-51, December 1	1, 1995.		
	L-117	"Control Data 6400/6500/ 6600 Comput http://led-thelen.org/comp-hist/CDC-660				
	L-118	"Where now for Media processors?", Ni	ick Flaherty, Electronics Times	s, August 24, 1998.		
	L-116	George H. Barnes et al., The ILLIAC IV August 1968.	Computer ¹ , IEEE Trans., C-	·17 vol. 8, pp. 746-757,		
	L-120	J.E. Thornton, Design of a Computer - T	The Control Data 6600 (1970).			
	L-121	Gerry Kane, PA-RISC 2.0 Architecture" 13-182734-0, p. 6-1—6-26.	', Chp. 6 Instruction Set Overv	iew, Prentice Hall isbn 0-		
	L-122	Cosoroaba, A.B., "Synchronous DRAM Microelectronics, Southcod95 May 709		ry system design," Fujitsu		
	L-123	Intel 450KX/GX PCIset, Inetel Corporat	tion, 1996			
	L-124	Baland, Granito, Marcotte, Messina, Sm IBM System Journal, January, 1967, pp.		odel 91 : Storage System"		
	L-125	File History of U.S. Patent Application 1	No. 08/340,740 (filed Novemb	er 16, 1994).		
	L-126	File history of U.S. Patent Application N	No. 07/663,314 (filed March 1,	1991).		
	L-117	S.S. Reddi et. al. "A Conceptual Framev Vol. 8, No. 2, June 1976.	work for Computer Architectur	e" Computing Surveys,.		
	L-128	Yulun Wang, et al, "The 3DP: A process January 1992, p. 25-36.	sor Architecture for Three-Dim	nensional Applications,		
		EXAMINER	DATE C	CONSIDERED		

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EXAMINER'S INITIALS	CITE NO.		LETTERS), title of the article (when appropriate), title of the item (book, magazine,), date, page(s), volume-issue number(s), publisher, city and/or country where			
	L-129	"IEEE Draft Standard for High-Band Technology (RamLink)", 1995, pp.1-		n SCI Signaling		
	L-130	Gerry Kane and Joe Heinrich, "MIPS Simon & Shuster Company, Upper Sa		sher: Prentice-Hall Inc., A		
	L-131	CATHY MAY et al. "The Power PC Architecture: A Specification For A New Family of Risc Processors" Second Edition May 1994, pp. 1—518, Morgan Kaufmann Publishers, Inc. San Francisco CA, IBM International Business Machines, Inc.				
	L-132					
	L-133 DON TOLMIE and Don Flanagan, "HIPPI: It's Not Just for Supercomputers Anymore" Data Communications published May 8, 1995. L-136 IEEE Draft Standard for "High-Bandwidth Memory Interface Based on SCI Signaling Technology (RamLink)", IEEE Standards Department, Draft 1.25 IEEE P1596.4-199X May 1995.					
	L-137	JOE HEINRICH, "MIPS R4000 Micr Technologies, Inc. pp. 1-754.	oprocessor User's Manual Secon	d Edition"1994 MIPS		
	L-138	Litigation proceedings in the matter of Corrected Preliminary Invalidity Con No. 2:04-CV-120(TJW), U.S. District	tentions and Exhibits, filed Janua	ry 12, 2005, Civil Action		
	L-139	Ang, StarT Next Generation: Integrat of the ISCA 1992.	ing Global Caches and Dataflow	Architecture, Proceedings		
	L-140	Saturn Architecture Specification, pul	blished April 29, 1993.			
	L-141	C4/XA Architecture Overview, Conv 1993 and February 4, 1994.	ex Technical Marketing presentat	tion dated November 11,		
	L-142	Convex 3400 Supercomputer System	Overview, published July 24, 19	91.		
	L-143	Giloi, Parallel Programming Models a IEEE Proceedings published Septemb		Parallel Architectures,		
	L-144	PCT International Search Report and PCT/US04/22126		, 2005, corresponding to		
	L-145	Supplementary European Search Rep No. 96928129.4	ort dated March 18, 2005, corresp	ponding to Application		
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